

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A ~~brittleness rating~~ method of ~~rating~~ predicting brittleness of a ~~coating substance for an intended use~~ freestanding film comprising the steps of:

causing a test film piece formed by laminating a support with a coating substance to produce deformation, the coating substance being made from a same material as the freestanding film;

detecting acoustic emissions that said coating substance produces resulting from said deformation ~~of said test film piece;~~ and

rating brittleness of only said coating substance on the basis of an outcome of said detection of acoustic emissions.

2. (original) A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 1, wherein said deformation is produced by applying an external load to said test film piece supported at opposite sides in a transverse direction of said test film piece at a middle between said opposite sides by compressive means.

3. (original) A brittleness rating method of rating brittleness of a coating substance for an intended use as defined

in claim 2, wherein said external load is applied to said test film piece by said compression head descending at a constant speed.

4. (original) A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 1, wherein said acoustic emissions are detected by an acoustic emission sensor attached to said test film piece.

5. (original) A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 1, wherein brittleness of said coating substance is rated on the basis of said deformation at said detection of a first acoustic emission.

6. (original) A brittleness rating method of rating brittleness of a coating substance for an intended use as defined in claim 3, wherein brittleness of said coating substance is rated as qualified for an electrophotographic image receiving film in the event that a distance of descent of said compression head is greater than 2 mm at detection of a first one of said acoustic emissions when said test film piece is supported at opposite sides separated at a distance of 50 mm in a transverse direction of said test film piece.

7. (currently amended) A brittleness rating device for rating brittleness of a coating substance for an intended use which uses a test film piece prepared by laminating a support with said coating substance, said brittleness rating equipment

comprising:

deforming means for causing said test film piece to produce deformation by applying an external load to said test film piece supported at opposite sides in a transverse direction of said test film piece at a middle between said opposite sides by compressive means;

acoustic emission detecting means for detecting acoustic emissions that said coating substance produces resulting from said deformation of said test film piece, said acoustic emission detecting means being detachably attached to said test film piece; and

rating means for rating brittleness of only said coating substance on the basis of an output from said acoustic emission detecting means.

8. (original) A brittleness rating device for rating brittleness of a coating substance for an intended use as defined in claim 7, wherein said deforming means comprises a compressive transverse test device having two supporting wedges for supporting said test film piece at opposite sides in a transverse direction of said test film piece and a compressive head for applying an external load to said test film piece at a middle between said opposite sides.

9. (original) A brittleness rating device for rating brittleness of a coating substance for an intended use as defined

in claim 8, wherein said compressive head descends at a constant speed.

10. (new) A method of predicting brittleness of a freestanding film comprising the steps of:

creating a laminated test piece by applying to a support piece a coating substance that can be used to produce the freestanding film;

deforming the laminated test piece at a known rate;

detecting acoustic emissions generated by the laminated test piece due to the deformation; and

predicting a brittleness rating of the freestanding film based on the acoustic emissions from the laminated test piece.

11. (new) The method of predicting brittleness of claim 10, wherein the deforming step comprises:

providing support to one face of the test piece at opposite ends in a transverse direction; and

applying an external load to an opposing face of the test piece between said opposite ends by a compression head.

12. (new) The method of predicting brittleness of claim 11, wherein said external load is applied by causing the compression head to descend at a constant speed.

13. (new) The method of predicting brittleness of claim 10, wherein said acoustic emissions are detected by an acoustic emission sensor attached to said test piece.

14. (new) The method of predicting brittleness of claim 10, wherein the predicted brittleness of said freestanding film is provided based on an extent of said deformation at the time of said detection of a first acoustic emission.

15. (new) The method of predicting brittleness of claim 12, wherein the predicted brittleness of the freestanding film is rated as qualified for an electrophotographic image receiving film in the event that a distance of descent of said compression head is greater than 2 mm upon detection of a first one of said acoustic emissions when said test piece is supported at opposite sides separated at a distance of 50 mm in a transverse direction of said test piece.

16. (new) The method of predicting brittleness of claim 11, wherein the face to which the support is provided is the coating substance, and the face to which compression head is applied is the support piece.